

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH ADMINISTRATION
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

Project

Date

Author

TITLE

FOREST INSECT CONDITIONS COEUR D'ALENE NATIONAL FOREST

1950 - 1951

Forest Insect Laboratory
Coeur d'Alene, Idaho
March 3, 1952

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Within the Coeur d'Alene National Forest, there are 157,553 acres of white pine timber. Of this total, 49,000 acres are of poles, varying in age from 41 to 80 years. On this total acreage there are 780 million board feet of merchantable white pine. Since 1930 bark beetle surveys of the white pine acreages on this forest have shown a loss of approximately 330,400 trees or 165 million board feet. This loss is only on areas covered by surveys, and does not include other white pine acreage.

The Downey-Yellow Dog group of units comprising some 16,000 acres can be cited as an example of these losses. Since 1930 adequate surveys of these five units have shown the loss from bark beetles to be 70 million board feet of valuable white pine. A 1949 timber survey of this area indicated a residual stocking of 200 million board feet of white pine. These data show that from 1930 to 1952 the loss amounted to 26% of the original volume. During 10 different seasons during this 22 year period hot spotting control was directed to areas where severe epidemic conditions existed. However, during these 10 control projects only 29,280 trees or 21% of the 139,000 infested trees were treated. Obviously, the benefits derived from this control were in proportion to the total number of trees treated. However, judging from other areas where similar infestations existed and where no maintenance control was conducted, it can be stated that even this inadequate program of control was responsible for the preservation of a large percent of the white pine volume now present within the area.

1950 Surveys

The following tabulation shows the areas covered by a survey in 1950 and compared with data obtained from similar surveys in 1949. These surveys were made by sample strips covering as much as 5 to 7 percent of the area.

	Acres	Infested Trees Per Unit	
		1950	1949
<hr/>			
Downey-Yellow Dog Units			
Yellow Dog River	2,140	1,545	1,140
Yellow Dog Creek	4,120	3,224	4,068
Downey Creek	4,160	1,935	4,160
Sissons Unit	4,700	1,131	2,200
North Yellow Dog Unit	840	356	371
Upper Indian Creek	200	61	48
Laverne Creek	2,560	140	58
Cougar Creek	7,300	1,387	1,425
		<hr/> 9,779	<hr/> 13,470

Although most of these areas indicated a reduction in the severity of the infestation from 1949 to 1950, the situation in the Downey-Yellow Dog units was still considered as being serious and warranting some action.

1951 Surveys

During the 1951 season surveys were again extended to areas on the Coeur d'Alene National Forest where dangerous and potentially dangerous infestations were known to exist. The following table shows the areas covered by bark beetle surveys during the 1951 season, with the data for 1950 used for comparison.

	Acres	Infested Trees Per Unit	
		1950	1951
Yellow Dog River	2,140	1,545	435
Yellow Dog Creek	4,120	3,224	906
Downey Creek	4,160	1,935	1,580
Sissons	4,700	1,131	799
North Yellow Dog	840	356	277
Bennett Creek	580	--	174
Brett-Miner Creek	1,550	--	None
Rock City	1,600	--	480
Hawk-Eye Creek	8,780	--	263
Upper Flat Creek	3,680	--	368
Lower Flat Creek	4,120	--	206
Cougar Creek	7,300	1,387	2,000
West Fork Steamboat	3,000	--	2,000
		<u>9,578</u>	<u>9488</u>

Data obtained in 1951 indicates a still further reduction in the severity of the infestation within the Yellow Dog-Downey group of areas. Although these data depict existing conditions, some explanations should be made to avoid false conclusions. In the Yellow Dog River unit a portion of the area containing a heavy concentration of several hundred or more infested trees, was eliminated from the survey as it was subsequently sold and logged. In the Yellow Dog area there was also a marked reduction in the severity of the infestation as indicated by the 1950 survey. This reduction is undoubtedly due to the effects of right of way clearings, for roads that have been extended into the area. Beetles were attracted to the freshly cut white pine logs and removed from the woods. A timber sale is planned for this area which will aid in reducing and holding the infestation to a low population level. This sale may not be underway much before the latter part of the 1952 season. Control would be directed to areas of severe infestation in portions of these five units that will be remote from the beneficial effects of logging for a number of years. Although the present infestation averages but one-fourth of a tree per acre, its potential seriousness is still appreciated. Severe losses have and can continue to occur in a year or two.

The Cougar Creek Unit has carried a severe rather static infestation for a number of years. In some portions of the area the losses of white pine as a result of mountain pine beetle attack has amounted to a fairly large percent of the stand. The 1950 survey indicated a potentially serious infestation, and a red top survey (1950) attacks showed little indication of any change.

The West Fork of Steamboat Creek, carries an infestation that is considered as comparable to the Cougar Creek area. Data for this area is from visual checks of red tops.

Summary of 1950 - 1951 Surveys and Recommendations

As stated, the infestation within the Downey-Yellow Dog group of areas is still a potential threat to the valuable timber stands of the area. It is entirely possible for this infestation to rebuild to serious proportions within the next year or two which would destroy an additional percent of the residual stocking. Control measures are recommended for this area if 1952 surveys indicate conditions that warrant such action.

Cougar Creek has suffered severe losses during the past 20 years. It contains a valuable stand of white pine which for economic reasons will not be sold for 8 or 10 years. Protection of existing values within this drainage are essential to the proper management of this forest.

West Fork of Steamboat Creek presents a situation quite comparable to the Cougar Creek unit. Valuable timber stands are being badly depleted, and should be protected until such time as the area can be placed under controlled management.

Downey Yellow Dog Units	16,000 Acres	4,000 Infested trees
Cougar Creek	7,000 Acres	2,000 Infested trees
West Fork Steamboat Creek	<u>3,000 Acres</u>	<u>2,000 Infested trees</u>
	26,000 Acres	8,000 Infested trees